

Title (en)  
Device with at least one ptc resistor

Title (de)  
Einrichtung mit wenigstens einem Kaltleiter

Title (fr)  
Dispositif doté d'au moins une résistance à coefficient de température positif

Publication  
**EP 2051561 A1 20090422 (DE)**

Application  
**EP 08017977 A 20081014**

Priority  
DE 102007049555 A 20071016

Abstract (en)  
The device (10) has a ceramic positive temperature coefficient thermistor (30) dimensioned in such a manner that voltage drop does not exceed more than 40 voltage/millimeter over the thermistor, which is developed from multiple positive temperature coefficient thermistor elements (32) formed in rows and parallel. The thermistor elements exhibit a thickness of approximately 2 millimeter and breadth of approximately 6 millimeter. The thermistor elements are implemented as ceramic components with non-linear resistance characteristics.

Abstract (de)  
Die vorliegende Erfindung betrifft eine Einrichtung mit wenigstens einem Kaltleiter und wenigstens einer mit dem Kaltleiter in Verbindung stehenden Wechselspannungsquelle, wobei der Kaltleiter derart dimensioniert ist, dass der Spannungsabfall über den Kaltleiter den Wert von 40 V/mm nicht übersteigt.

IPC 8 full level  
**H05B 3/50** (2006.01); **B60H 1/22** (2006.01); **F24H 3/04** (2006.01); **H05B 3/14** (2006.01)

CPC (source: EP US)  
**F24H 3/0405** (2013.01 - EP US); **F24H 3/0429** (2013.01 - EP US); **F24H 3/0435** (2013.01 - EP US); **F24H 3/0447** (2013.01 - EP US);  
**F24H 3/0452** (2013.01 - EP US); **F24H 9/1872** (2013.01 - EP US); **H05B 3/141** (2013.01 - EP US); **H05B 3/50** (2013.01 - EP US);  
**H05B 2203/02** (2013.01 - EP US)

Citation (search report)  
• [X] US 4703153 A 19871027 - PELONIS KOSTA [CA]  
• [X] US 3927300 A 19751216 - WADA SHIGETAKA, et al  
• [X] US 5592647 A 19970107 - YAMAUCHI MASAHIRO [JP], et al  
• [A] DE 3820918 A1 19891228 - SIEMENS AG [DE]  
• [A] EP 0616486 A1 19940921 - TEXAS INSTRUMENTS INC [US]  
• [A] DE 19933013 A1 20010201 - VALEO KLIMASYSTEME GMBH [DE]

Designated contracting state (EPC)  
DE ES FR GB IT

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 2051561 A1 20090422; EP 2051561 B1 20150429**; CA 2640987 A1 20090416; CA 2640987 C 20151201; CN 101413718 A 20090422;  
DE 102007049555 A1 20090423; JP 2009099992 A 20090507; RU 2008140989 A 20100420; RU 2488983 C2 20130727;  
US 2009121824 A1 20090514; US 8212647 B2 20120703

DOCDB simple family (application)  
**EP 08017977 A 20081014**; CA 2640987 A 20081014; CN 200810167976 A 20081016; DE 102007049555 A 20071016;  
JP 2008267904 A 20081016; RU 2008140989 A 20081015; US 28812308 A 20081016